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TO: Members of the Natural Resources Board

FROM: Scott Hassett, Secretary

SUBJECT: Recommendation to Authorize Public Hearings for Revising the New Source Review Regulations, Chapters NR 405 and NR 408

Why are the revised rules being proposed?

On December 31, 2002, the United States Environmental Protection Agency (EPA) published regulations that significantly change the way new and modified sources of air pollution are permitted. Wisconsin has three years in which to either adopt the federal rules or submit "different but equivalent regulations" as a State Implementation Plan revision.

In March 2003, the State of Wisconsin petitioned for a review challenging EPA's New Source Review Rule, as did eleven other states. It is quite likely that the federal rule, as written, would result in more air pollutants being released than under the former NSR regulations. This would make it more difficult for Wisconsin to meet the air quality standard for ozone due to pollutants being transported into the state from other states. At the same time, there are many features of the former NSR regulations that are in need of improvement. The Department supports many of the concepts that are included in the revised federal rules. This represents an excellent opportunity to revise our new source program to remove some of the barriers to plant modifications in such a way that air quality is not sacrificed.

Since promulgation of these federal rules, the Department has evaluated the rules, established a stakeholder group to advise the Department and, working with the stakeholder group, developed a proposal for revising Wisconsin's New Source Review (NSR) regulations.

The Department convened an advisory group to provide assistance to the Department in promulgating an improved version of the new Federal Rules in the Wis. Adm. Code. While a number of non-governmental organizations and citizen groups were asked to join the advisory group, all of these groups/organizations declined the Department's invitation. Thus, the advisory group was solely made up of permittees and representatives of specific industry groups.

The Department approached the meetings with the Advisory group and the rule writing process in general with four basic goals in mind. These are, in no particular order:

1. Develop a rule which reduces the administrative burden of the NSR program on both permittees and the Department.
2. Develop a rule which is as effective as the current rule in protecting the environment and in allowing for public input on proposed projects.
3. Develop a rule which meets the Department's statutory obligations.
4. Develop a rule which is likely to be approved by USEPA.

The Advisory Group met weekly starting in mid-September. Through these meetings, the Department has developed a proposal for implementing the December 31, 2002, changes to the federal regulations in Wisconsin which it believes meets all of these goals.

Summary of the revised rules and their effect on existing policy

The changes are summarized in this memo by major subgroup in a format similar to that presented to the Board in a March 2003 informational item. This memo is not meant to be a summary of all changes to the existing administrative code or all changes that the Department is proposing in the federal rule. The purpose of this memo is to highlight the major elements of the federal rule and how the Department is presently proposing to implement these elements in Wisconsin.

1. Baseline Actual Emissions

Existing Rule: Under the existing NSR Program, actual emissions are determined using the two most recent years (24 months) of source operation. An alternative 2-year period can be used if the permitting authority agrees with the source that it is more representative of plant operations. The same baseline period must be used for each emission unit which is impacted by the project and for each pollutant. All replacement units are treated as new units under the existing program.

Federal Rule: EPA has revised this period to be any 24 consecutive month period in the previous 10 years. The new program allows sources to pick which 24-month period they feel best represents their emission rates at their most productive state. While there is some ability to adjust this emission rate to reflect decreases that may be brought on by regulatory programs, the source is able to select its highest emission period in the last 10 years as the beginning point in applicability determinations. The EPA rule also allows all new emission units which were installed after the baseline period to have their potential emissions used as their baseline emissions. Additionally, a different baseline period may be selected for each pollutant. Finally, the EPA rule treats replacement units as existing units in that they are allowed to use the same baseline actual emissions as the unit they are replacing. This method of calculating historic actual emissions is available to all types of sources with the exception of electric steam generating utilities, where a 5 year period is used instead of ten.

Proposal: The Department is proposing that facilities be able to use any 2 years in the past ten years for establishing baseline emissions, as in the federal rule. However, the state rules provide that the same baseline period must be used for all pollutants, unless the Department approves an alternative time period. The Department is also proposing that replacement units be treated as new units, as they are under the existing program. Additionally, the Department is proposing that any new units installed after the baseline period that have at least a 24-month actual emission history be required to use their actual emissions in the baseline.

2. Methodology for Calculating Emission Increases

Existing Rule: Emission increases brought on by plant modifications are calculated by subtracting the baseline emission rate, calculated using the procedure in Point 1, from the source's potential to emit for that pollutant (this is often referred to as the potential to actual test). The potential to emit can be reduced by enforceable conditions and this is often done in permits in order to avoid having an emission increase above the PSD significance. Acceptance of these limits is generally reflected as a synthetic minor emission limitation.

Federal Rule: The new NSR rules allow facilities to calculate emissions as provided under the existing rule or to use a projection of future actual emissions to calculate the net emissions increase. Under the new method, the facility projects what the future actual emissions will be from an affected source, less any increase related to an increase in demand for the product which is unrelated to the proposed project, and then subtracts the past actual emissions to arrive at an estimate of the net emission increase from the project. The federal rule does not provide any instructions as to how demand is to be estimated or how to determine if an increase in demand is

related or unrelated to a project. Additionally, unlike the "synthetic minor" option presently available, the projection of future actual emission is NOT an enforceable limit on future emissions.

The projected future actual emission rates are an optional election for the source and do come with additional record keeping and reporting requirements. Sources can instead choose to use the future allowable emission rate of the source and avoid the record keeping and reporting requirements.

Proposal: The Department is proposing that the Federal applicability test, including a demand growth factor, be adopted. However, the Department is looking for input as to how this factor should be calculated. Without clear standards for estimating demand growth, it will be difficult for the Department to include a demand provision in the final rule.

3. Plantwide Applicability Limitations (PALs)

Existing Rule: There are no PALs in the existing program.

Federal Rule: The new NSR regulations establish a program by which a facility's emissions of a regulated pollutant are capped using a plantwide applicability limitation (PAL). Multiple PALs can be issued to a facility so that emissions of several regulated pollutants are restricted. As long as a facility is able to comply with its PAL(s), changes may occur at the facility without obtaining a permit under the NSR program. The emission limitation used to establish the PAL is developed using the facility's baseline actual emission rate plus the allowable emissions of the PAL regulated pollutant from new units plus an additional margin for insignificant growth. There is no prerequisite that emissions included in the baseline actual emission calculation be subject to air pollution controls to qualify for inclusion in the PAL when it is initially set. A PAL lasts for 10 years after which the facility may either opt out of the PAL or renew the PAL at an appropriate emission level.

Sources that find that they will need to increase their PAL to accommodate a new emissions unit or modification of an existing emissions unit may do so. However such increases require the PAL to be adjusted to a level that is equivalent to that which would apply if emissions controls were placed on all significant sources of the pollutant regulated by the PAL at the facility.

Proposal: The Department is proposing that the federal PAL proposal be accepted in Wisconsin with the option to exclude any emission unit that it is designated a "clean unit" (see point 4) from the PAL. The emission baseline would be calculated as described under Point 1. Additionally, the Department is proposing that PAL facilities which are located in a non-attainment area (an area which is not attaining the federal standards for a pollutant) be subject to a declining emission cap for the non-attainment pollutant(s). Essentially, this would require that facilities achieve a BACT (Best Available Control Technology) level of control on all significant emission units prior to the expiration of the PAL.

4. Clean Unit Applicability Test

Existing Rule: There are no clean unit provisions in the existing rule.

Federal Rule: Emissions units that have installed pollution control equipment that was, at the time of installation, considered BACT or LAER are classified as "clean units". To qualify as a "clean unit", a capital investment into a particular control technology (including pollution prevention and work practices) has to have been made to control pollutant emissions to levels substantially as effective as BACT. Qualification as a clean unit is maintained for a period of ten years and can be applied retroactively. Modifications to emissions units that qualify under the clean unit applicability test are not subject to NSR provisions provided the unit will continue to

meet its allowable emission limits following the modification and the capacity of the unit will not be increased

Proposal: The Department is proposing to accept the federal Clean Unit provisions with the proviso that retroactive determinations will only be made back as far as 2001. The Department is also adding a provision to cover situations where an area is redesignated from attainment to non-attainment. The proposed rule lays out three options and asks for comments on them

5. Pollution Control Project (PCP) Exclusion

Existing Rule: Under the existing rule, utility sources have been allowed to undertake pollution control projects and have such projects be exempt from NSR. Additionally, since late 1994, other source categories have been able to request a PCP exclusion under a policy memo issued by USEPA.

Federal Rule: Projects that are classified as pollution control and prevention measures can be excluded from the NSR program under this concept. The change in regulation establishes this policy into the regulation and sets forth provisions on classification of such projects. Qualifying projects under this program must be conducted on existing emissions units and result in a “net environmental gain”. EPA has provided a listing of qualifying projects within the regulation that it considers having a net environmental gain. Facilities choosing to embark on a listed qualifying pollution control project may do so by providing notice to the permitting authority and are not required to obtain concurrence in order to proceed. Prior to undertaking a non-listed project, the facility must demonstrate that the project is environmentally beneficial and the proposal is subject to public review and comment.

Proposal: The Department is proposing a rule which is essentially identical to that required under the Federal Rule.

Ongoing Litigation (December 31, 2002 Rule)

Presently, the State of Wisconsin, along with many other States and public interest groups, is actively involved in litigation in opposition to many elements of the Federal Rule Proposal. This litigation has been ongoing for nearly a year and a briefing schedule and court date (if needed) have yet to be set.

Future Activities

The USEPA promulgated a rule to address the issue of replacement of parts of process units under the NSR Program on August 27, 2003. Litigation in opposition to this rule has been initiated by the State of Wisconsin in conjunction with many other States and public interest groups. The Department is proposing to begin rule making in this area in June 2004.

The Department is also planning to initiate rulemaking in January 2004 to make changes to the State's minor source NSR program to make it consistent with the major NSR changes proposed in today's Rule proposal.

Has the Board dealt with these issues before?

In February 2003, the Natural Resources Board was briefed on the revised federal rules and the options available to the Department in responding to the rules.

Who will be impacted by the proposed rule revisions? How?

Owners and operators of major sources of air emissions will be impacted by these rule revisions. Major sources are defined as:

- 1. Attainment areas: sources in one of 28 listed categories which have potential emissions of at least one criteria pollutant in excess of 100 tons/year
- all other sources which have potential emission of at least one criteria pollutant in excess of 250 tons/year

2. Non-attainment areas: Sources which potential emission for the non-attainment pollutant in excess of the level established by law. This amount varies with the type of non-attainment pollutant and the severity of the non-attainment problem. For example, a major VOC emission source in Milwaukee County is a source with potential VOC emission in excess of 25 tons/year.

The revised rules will provide these facilities with greater flexibility to make plant modifications and will reduce the administrative burden associated with the permitting process.

Potential Controversies

The proposed revised rules are controversial. The two major areas of controversy are:

- Whether the Department should be revising the rules at this time, in light of the state's legal challenge to the federal rules.
- Whether the Department should adopt the federal rules, as written, rather than revising them.
- Whether the Department's proposal is consistent with the position the State is advocating in the lawsuit challenging the EPA rules.

Environmental Analysis

As mentioned previously, the Department believes that the EPA rule will lead to greater emissions from affected facilities than would occur under the present regulations. The primary rule change which the Department believes, based on a review of historical permitting information, would lead to the greatest increase in emissions is EPA's proposal to treat replacement emission units as existing units instead of as new units. The Department's proposal maintains the existing treatment of these units as new emission units.

Additionally, the Department has changed the program in other ways which should limit or eliminate any increase in emissions which may be realized by the EPA rules. The most significant of these changes is the method of calculating baseline emissions that the Department is proposing. The Department's proposal will eliminate the possibility of a "new unit" inflating the historic baseline and the ability of facilities to selectively choose high emission periods for each pollutant (i.e. a different baseline period for each pollutant).

During this comment period, the Department will continue its evaluation of the environmental impact of these rules and will have a final analysis ready prior to asking the Board for final approval of the Rule package.

Small Business Analysis

It is unlikely that small businesses will be impacted by these rule revisions.

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